PATENT
Customer No. 22,852
Attorney Docket No. 05725.0414-01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	)	
	)	
Roland DE LA METTRIE et al.	)	Group Art Unit: 1751
	)	
Application No.: 09/852,624	)	
	)	Examiner: Eisa B. Elhilo
Filed: May 11, 2001	)	
	)	
For: OXIDISING COMPOSITION FOR TREATING KERATIN FIBRES	)	

Mail Stop Appeal Brief--Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

In support of the Notice of Appeal filed April 19, 2004, the period for response extended to November 19, 2004, by the accompanying petition and fee, and pursuant to 37 C.F.R. § 41.37, Appellants present one copy of their brief (37 C.F.R. § 41.37(a)(1); Rules of Practice Before the Board of Patent Appeals and Interferences, 69 *Fed. Reg.* 49962 (Aug. 12, 2004)(to be codified at 37 C.F.R. parts 1, 5, 10, 11 and 41)) which is accompanied by the payment of the $340.00 fee under 37 C.F.R. § 41.20(b)(2).

This appeal is in response to the final rejection of claims 30-46 which are set forth in the attached Appendix. If any additional fees are required or if the enclosed payment is insufficient, Appellants request that the required fees be charged to our Deposit Account No. 06-0916.

TABLE OF CONTENTS

Page No.

I. Real Party in Interest

L'Oréal is the assignee of record as indicated by the assignment of the parent application (Application No. 09/319,201 now issued Patent No. 6,261,325) to L'Oreal, which was recorded in the U.S. Patent and Trademark Office on July 6, 1999, at Reel 010137, Frame 0250. Because the instant application is a divisional application of Pat. No. 6,261,325 pursuant to 37 C.F.R. 1.53(b), L'Oreal is the real party in interest. M.P.E.P. § 306.

II. Related Appeals and Interferences

Appellants know of no other appeal or interference that will directly affect, be directly affected by, or have a bearing on the decision of the Board of Patent Appeals and Interferences in this appeal.

III. Status of Claims

Claims 30-53 are pending in this application. Claims 47-53 have been withdrawn by the Examiner as being allegedly drawn to a non-elected invention. No claims have been allowed. As indicated in the final Office Action dated October 21, 2003 and the Advisory Action dated June 29, 2004, the claims have been finally rejected as follows:

Claims 30-46 have been finally rejected under 35 U.S.C. §103(a) over Tomura et al. (U.S. Pat. No. 6,027,719) ("Tomura") in view of Lim et al. (U.S. Pat. No. 6,045,590) ("Lim"). The claims are set forth in the Claims Appendix.

IV. Status of Amendments

All amendments have been entered.

No claim amendments have been requested subsequent to the final rejection.

V. Summary of Invention

The present invention relates to ready-to-use oxidizing compositions intended for treating keratin fibers, comprising (a) at least one enzyme chosen from 2-electron oxidoreductases, (b) at least one donor for said at least one enzyme, (c) at least one anionic surfactant chosen from acylisethionates, acyltaurates, acylsarcosinates, acylglutamates, polyoxyalkylenated carboxylic ether acids and salts thereof, fatty glucamide sulphates, alkylgalactoside urinates, and anionic derivatives of alkylpolyglucoside, and (d) at least one oxidation base. See independent claims 30 and 38-42 and Specification page 4, lines 28-35.

The present invention also relates to a process for dyeing keratin fibers comprising applying the composition described above to the keratin fibers and developing for a period of time sufficient to achieve a desired coloration. See independent claim 43, and Specification page 19, line 36 to page 20, line 10.

The present invention also relates to a process for dyeing keratin fibers comprising storing a first and a second composition separately; mixing the two compositions; applying the mixture to the keratin fibers; and developing for a period of time sufficient to achieve a desired coloration. The first composition comprises at least one oxidation base. The second composition comprises the enzyme and donor, as described above, and at least one of the first and second compositions further comprises the at least one anionic surfactant. See independent claim 45, and Specification page 20, line 36 to page 20, line 10.

Finally, the present invention also relates to a multi-compartment dyeing kit that comprises at least two separate compartments. The first compartment contains a first composition comprising at least one oxidation base. The second compartment contains a second composition comprising the enzyme and donor, as described above, and at least one of the first and second compositions further comprises at least one anionic surfactant. See independent claim 46, and Specification page 20, lines 27-35.

It is known in the art of oxidation dyeing of keratin fibers to use hydrogen peroxide as the oxidizing agent in dye compositions. Specification page 2, lines 5-7. Treatment with hydrogen peroxide, however, has the drawback of degrading and over-bleaching of the keratin fibers. Specification page 2, lines 7-11. Although other oxidation systems, including enzymatic systems, can be substituted for hydrogen peroxide, they are unsatisfactory because (1) they lack homogeneity in color distribution both along the fiber and among the fibers, (2) they lack dyeing power, and (3) the subjected fibers lack sufficient resistance against the aggressive factors to which the hairs may be subjected. Specification page 2, lines 12-30.

In the present invention, the oxidizing compositions and methods for dyeing keratin fibers provide a more homogeneous, more intense, and more chromatic coloration without giving rise to any significant keratin fiber degradation. Specification, page 4, lines 36-38. The resulting keratin fiber colorations are relatively unselective, as desired, and show good resistance to the various aggressive factors to which keratin fibers may be subjected. Specification page 4, line 38 to page 5, line 2.

VI. Grounds of Rejection to be Reviewed on Appeal

Claims 30-46 stand rejected under 35 U.S.C. §103(a) over Tomura et al. (U.S. Pat. No. 6,027,719) ("Tomura") in view of Lim et al. (U.S. Pat. No. 6,045,590) ("Lim").

VII. Argument

A. Background: Factual Inquiries to Determine Obviousness

Several basic factual inquires must be made in order to determine the obviousness or non-obviousness of claims of a patent application under 35 U.S.C. § 103. These factual inquiries, set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 U.S.P.Q. 459, 467 (1966), require the Examiner to:

(1) Determine the scope and content of the prior art;
(2) Ascertain the differences between the prior art and the claims in issue;
(3) Resolve the level of ordinary skill in the pertinent art; and
(4) Evaluate evidence of secondary considerations.

The obviousness or nonobviousness of the claimed invention is then evaluated in view of the results of these inquiries. *Graham*, 383 U.S. at 17-18. In making this evaluation, the references must be considered as a whole, and must suggest the desirability and thus the obviousness of making the combination. *See* M.P.E.P. § 2141. The references must also be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention. *Id.*

In order to carry the initial burden of establishing a *prima facie* case of obviousness that satisfies the *Graham* standard, the Examiner must show (1) that there exists some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings, (2) that there is a reasonable expectation of success, and (3) that all claim elements are disclosed by the prior art references. *See* M.P.E.P. § 2143.

In the present case, Appellants' position is that the Examiner has not shown the existence of both (1) a reasonable expectation of success and (2) a motivation to combine Tomura with Lim. Accordingly, the Examiner has not met his initial burden of establishing a *prima facie* case of obviousness. He has failed to provide a "clear and particular" suggestion or "particular findings" supporting his combination of the cited references. See *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999) see also *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000). He has also failed to provide evidence of "a reasonable likelihood of success, viewed in light of the prior art" at the time the invention was made. *In re Dow Chemical Co.*, 837 F.2d. 469, 473, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); See M.P.E.P. § 2143.02.

Simply because references can be modified or combined is not sufficient basis to establish a *prima facie* case of obviousness. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. And even if the claimed limitations are within the capabilities of one skilled in the art, such capabilities, by themselves, are not sufficient to establish a *prima facie* case of obviousness. *In re Kotzab*, 217 F.3d at 1370, 55 U.S.P.Q.2d at 1318; M.P.E.P. § 2143.01.

Thus, for the reasons set forth below, the Examiner has failed to meet the burden of establishing a *prima facie* case of obviousness.

B. Rejection of Claims 30-46 under 35 U.S.C. § 103(a)

Claims 30-46 are stand rejected under 35 U.S.C. §103(a) over Tomura et al. (U.S. Pat. No. 6,027,719) ("Tomura") in view of Lim et al. (U.S. Pat. No. 6,045,590)

("Lim") for the reasons of record. Advisory Action dated June 29, 2004; Office Action dated October 21, 2003, p. 2, Office Action dated December 9, 2002, pp. 2-4. Appellants disagree with the rejection because, at least, there is no evidence of a reasonable expectation of success in combining Tomura and Lim and, further, there is no motivation to combine the references even if there was a reasonable expectation of success.

1. No Reasonable Expectation of Success Because Tomura Teaches the Unpredictability of the Dissolution of Uric Acid, a Required Tomura Component, and the Addition of Lim's Ingredients Would Unpredictably Affect Uric Acid Stability

In particular, the Examiner has not adequately addressed, on the record, Appellants' arguments concerning reasonable expectation of success so as to establish a *prima facie* case of obviousness. Specifically, Appellants submit that there is no reasonable expectation of success in combining the teachings of Tomura with Lim, *inter alia*, because Tomura uses a hair dye composition that requires stable solubilization of uric acid whereas Lim does not.

a. Tomura teaches that uric acid solubility is unpredictably destabilized

Tomura repeatedly cautions that adding additional components would destabilize the solubilization of uric acid up to 2%, the primary objective of the invention. Tomura states in the "Background of the Invention" that "there are many problems [in producing a uric acid at a water solubility higher than 0.0067%] such as precipitation", and that "no satisfactory technique for stably solubilizing uric acid has yet been found." Col. 1, ll. 42, and 51-53. These statements by Tomura demonstrate the difficulty at the time of

producing a stable solubilized uric acid system at a level above 0.0067% solubility. Also, Tomura warns that other ingredients "can be appropriately added in so far as they do not adversely affect the [solubility of uric acid]". Col. 3, ll. 50-52. Next, Tomura describes that only after they had "intensively studied the behavior of uric acid in aqueous cosmetic composition[s]" did they find that uric acid could be solubilized up to 2%. Col. 2, ll. 1-7. In sum, Tomura unambiguously states that uric acid solubilization above 0.0067% is crucially sensitive to solution conditions. To conform to Tomura's invention, any added ingredient must not disturb this solubilization. Thus, according to Tomura, addition of other ingredients, generally, would unpredictably affect uric acid solubilization.

It follows, therefore, that one of ordinary skill in the art would not have reasonably expected success in combining Tomura with Lim, at least because (a) Tomura teaches that some surfactants are not satisfactory in solubilizing uric acid (Col. 1, ll. 50-53), and (b) no evidence has been provided that uric acid can be stably solubilized in the presence of acylsarcosinates or acylisethionates, the anionic surfactants of Lim to which the Examiner points. Thus, overall, no evidence has been provided that one can combine Tomura's uric acid system and Lim's acylsarcosinates or acylisethionates and still maintain Tomura's stably soluble uric acid, especially when additives generally are expected to cause adverse effects on uric acid solubilization, according to Tomura's own statements.

b. The Examiner's arguments are inadequate to overcome Tomura's teachings of unpredictability

Further, the Examiner infers that there is a reasonable expectation of success because "any of the species of the genus would have similar properties and thus, the same use as the genus as a whole." Office Action dated October 21, 2003, p. 3. This is incorrect. With regard to the genus of surfactants, all classes of surfactants do not have the same properties. For example, nonionic surfactants have different dissolution and stabilization properties compared to anionic surfactants. Indeed, Tomura indicates that not all surfactants are able to stably solubilize uric acid. Col. 1, ll. 50-53. With regard to the genus of anionic surfactants, it is also well-accepted that all anionic surfactants do not have the same properties. For example, the solubility and stabilization properties of phosphate-headed anionic surfactants can be significantly different from those that are carboxylate-headed. Thus, the Examiner's statement is not true when considering either the genus of surfactants or the genus of anionic surfactants. As a result, the Examiner's rationale is insufficient to provide a reasonable expectation of success, especially in the face of Tomura's statements regarding the unpredictable effects of surfactants on stably solubilizing uric acid.

In the Advisory Action, the Examiner contends that there is a reasonable expectation of success because "Tomura suggests the use of anionic surfactants in the dyeing composition (see col. 3, lines 42-43)." Advisory Action dated June 29, 2004, p. 2. However, the Examiner fails to address the statement at the end of that same paragraph which states that anionic surfactants "can [only be] added in so far as they

do not adversely affect the present invention." Col. 3, ll. 50-52 (emphasis added). This phrase conditions the addition of anionic surfactants on their not adversely affecting the uric acid stabilization. As such, this phrase reduces the alleged reasonable-expectation-of-success statement to that of an obvious-to-try statement for the anionic surfactant; but the obvious-to-try standard is not sufficient to make a *prima facie* case of obviousness. *In re O'Farrell*, 853 F.2d 894, 903, 7 U.S.P.Q.2d 1673, 1681 (Fed. Cir. 1988) (choosing among a varying range of possibilities presented in the prior art, where the prior art had no indication or direction of a successful result within that range, is not obvious); M.P.E.P. § 2145 X.B.

Similarly, the Examiner asserts that "Tomura clearly teaches that the dyeing composition comprises at least one surfactant (see col. 8, claim 2)." Advisory Action dated June 29, 2004, p. 2. Appellants assert that this is incorrect for at least three reasons. First, claim 2 of Tomura does not require a surfactant. The claims reads "**at least one of** a surfactant, an oily agent, ... or a perfume." Tomura, col. 8, ll. 21-28 (emphasis added). The composition only requires the presence of one of the listed ingredients, not all of them. Thus, a surfactant is not required in the composition of claim 2. Second, even if surfactants were required in claim 2 and there was a reasonable expectation of success in using them (Appellants do not admit either statement), the teaching of the genus of surfactants does not make the expectation of success reasonable for anionic surfactants, especially in light of the unpredictability of the stability of uric acid solubilization, as discussed above. Third, even if claim 2 required an anionic surfactant (which Appellants do not admit), the last phrase in claim 2 requires that any composition must maintain uric acid solubilization. The Examiner

has not provided evidence as to why there would be reasonable expectation of success in maintaining uric acid solubilization when anionic surfactants, such as those of Lim, are added when Tomura repeatedly teaches the unpredictability of uric acid solubilization, as discussed above.

Next, the Examiner asserts that "Tomura discloses the effects of combination of various alkalis and water soluble polymers on stability of solubilized uric acid in water and [does not] teach or disclose the effect of surfactants (see col. 4, Tables 1 and 2 and col. 5, Tables 3 and 4)." Advisory Action dated June 29, 2004, p. 2. Yet, the experimentation of the alkalis and the water soluble polymers shows that a large amount of experimentation is required to find solution conditions such that uric acid solubilization is stabilized when these ingredients are added. No such similar experimentation for surfactants of any type (anionic, cationic, nonionic, zwitterionic, etc...) has been evidenced by the Examiner. Indeed, Table 2 shows a great deal of interplay between the alkali-polymer pairs, in that uric acid solubility does not depend solely on which polymer is chosen but also on what alkali is chosen. Solubility of uric acid (Tomura's critical feature) in solutions comprising the polymers could not be predicted without the experimental evidence showing this interplay. Without similar experimentation to map out the interplay of solution conditions and surfactant (anionic or otherwise) concentrations, one of ordinary skill in the art at the time the present invention was made could simply not have had a reasonable expectation of success in producing a composition with stable uric acid solubilization.

Finally, Appellants respectfully contend that the Examiner's statement that surfactants or combinations of surfactants can be added for viscosity and foaming

properties (Advisory Action, dated June 29, 2004, page 2; Office Action dated October 21, 2003, page 3) does not cure the lack of a reasonable expectation of success because it does not address the issue of the unpredictability of uric acid solubilization.

2. No Motivation to Combine or Modify Tomura with Lim Because Examiner Has Provided No Evidence to Add Lim's Anionic Surfactants to Tomura's Delicately Balanced Uric Acid System

In addition to alleging a reasonable expectation of success, the Examiner has argued that there is a motivation to include Lim's surfactants in Tomura's composition because:

(a) "Tomura discloses the use of anionic surfactants as the genus in a hair dy[e]ing composition,"

(b) "Tomura suggests ... it is necessary to add surfactants and polymers in view of usability," and

(c) Lim suggests that different species of or combinations of anionic surfactants "can be used to impart particular viscosity and foaming properties."

Office Action dated October 21, 2003, p. 2.

In Appellants' view, their rebuttals to these three assertions provide the basis for their position that no motivation exists to combine these references.

Regarding point (a), the Examiner cites Tomura at column 3, lines 42-44, but fails to address the statement at the end of that same paragraph which states that anionic

surfactants "can [only be] added in so far as they **do not adversely affect the present invention**." Col. 3, ll. 50-52 (emphasis added). This phrase conditions the addition of anionic surfactants on their not adversely affecting the uric acid stabilization. This phrase reduces the alleged motivational statement to that of an obvious-to-try statement for the anionic surfactant; but, as discussed above with respect to the lack of reasonable expectation of success, the obvious-to-try standard is not sufficient to make a *prima facie* case of obviousness.

On point (b), the Examiner cites column 1, lines 49-50, but the Examiner does not address the statement following the quoted passage: "However, in aqueous cosmetic compositions containing surfactants and polymers, no satisfactory technique for stably solubilizing uric acid has yet been found." Col. 1, ll. 51-54. In fact, this statement negates the inference by the Examiner that any Lim surfactant could be used in the Tomura invention. Uric acid solubility as discussed in Tomura is very sensitive and central to the Tomura invention; yet uric acid solubilization is never mentioned in Lim because Lim's invention is not concerned with it. Thus, how is it possible that Lim could have motivated the addition of acylsarcosinates or acylisethionates while maintaining uric acid solubilization and enzyme activity when Lim does not address these considerations at all? At best it would be obvious to try, but, as discussed above, an obvious-to-try standard is not sufficient to establish a *prima facie* case of obviousness.

Thus, with regard to points (a) and (b), the Examiner has improperly selected statements from Tomura without considering the reference as a whole. "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that

would lead away from the claimed invention." M.P.E.P. § 2141.02 citing *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). By ignoring the very purpose of Tomura's invention and especially the statements following the passages quoted by the Examiner, the Examiner has not considered Tomura as a whole. This is particularly important here because when Tomura is considered as a whole, it does not yield the predictability required to establish a reasonable expectation of success, as discussed above.

With respect to point (c), the fact that a single anionic surfactant species or a combination of surfactants can be used to "impart viscosity and foaming properties" is insufficient to provide motivation to combine Lim with Tomura. "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests that desirability of the combination." M.P.E.P. § 2143.01 citing *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). Here, the Examiner has provided no motivation for why one of ordinary skill in the art at the time the invention was made would have chosen to use the anionic surfactants from Lim in the sensitive, delicately balanced uric-acid containing hair dye system of Tomura.

Furthermore, the Examiner has failed to provide specific reasoning for combining the teachings of Lim with those of Tomura. A convincing line of reasoning must be presented as to why one of ordinary skill in the art would pick and choose various elements and/or concepts from the prior art to arrive at the claimed invention. *Ex parte Clapp*, 227 U.S.P.Q. 972 (Bd. Pat. App. & Inter. 1985); *In re Wesslau*, 147 U.S.P.Q. 391 (Bd. Pat. App. & Inter. 1965); M.P.E.P. § 2144. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from

the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984); M.P.E.P. § 2141.02. Here, the Examiner cites Lim's listing of surfactants as sufficient motivation to choose a subgenus listed in Lim and include it in Tomura's composition. Office Action dated October 21, 2003, pp. 2-3. However, this motivational rationale is insufficient. Lim recites a list of 23 broad classes of surfactants and their combinations. Lim, col. 9, ll. 39-65. Two of the instantly claimed anionic surfactant types are included in this list, but the Examiner has provided no motivation to pick these two out of Lim's list of 23. The Examiner is not permitted to pick and choose limitations without proper evidence of motivation or suggestion, and neither is he allowed to apply an obvious-to-try standard, as discussed above. Since the Examiner has provided no evidence of motivation or suggestion for the choice of surfactant, the Examiner appears to improperly be using hindsight reconstruction with the Applicants' invention as the blueprint. However the Federal Circuit and its predecessor have long held that using the claimed invention as a blueprint to coble together prior art is improper. See *Grain Processing Corp. v. American Maize-Products Co.*, 840 F.2d 902, 5 U.S.P.Q.2d 1788 (Fed. Cir. 1988); *In re McLaughlin* 443 F.2d 1392, 170 U.S.P.Q. 209 (C.C.P.A. 1971); M.P.E.P. §§ 2143.01, 2145.X.A.

Thus, for at least the aforementioned reasons, Appellants submit that there is no suggestion of the desirability of this combination in either Lim or Tomura.

C. Conclusion

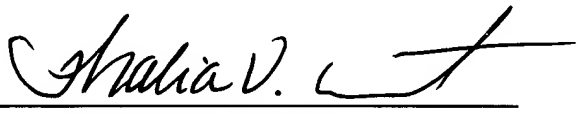
Appellants maintain that a *prima facie* case of obviousness has not been established by the Examiner. As discussed above, the Examiner has failed to provide sufficient evidence to show (1) that there was a reasonable expectation of success in the combination of Tomura and Lim to yield the claimed invention, and (2) that one of ordinary skill in the art would have been motivated to make both the modifications and combinations proposed by the Examiner. Accordingly, Appellants respectfully request reversal of the rejections of claims 30-46 under 35 U.S.C. § 103(a).

Please grant any extensions of time required to enter this Brief and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: October 28, 2004

By: 

Thalia V. Warnement
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VIII. Claims Appendix

30. (Previously presented) A ready-to-use composition for the oxidation dyeing of keratin fibers, comprising:

(a) at least one enzyme chosen from 2-electron oxidoreductases,

(b) at least one donor for said at least one enzyme,

(c) at least one anionic surfactant chosen from:

(i) acylisethionates;

(ii) acyltaurates;

(iii) acylsarcosinates;

(iv) acylglutamates;

(v) polyoxyalkylenated carboxylic ether acids and salts thereof;

(vi) fatty glucamide sulphates;

(vii) alkylgalactoside uronates; and

(viii) anionic derivatives of alkylpolyglucoside; and

(d) at least one oxidation base.

31. (Previously presented) The ready-to-use composition according to Claim 30, further comprising at least one coupler.

32. (Previously presented) The ready-to-use composition according to Claim 30, wherein said at least one oxidation base is chosen from para-phenylenediamines, double bases, ortho-aminophenols, para-aminophenols, heterocyclic bases, and acid-addition salts thereof.

33. (Previously presented) The ready-to-use composition according to Claim 30, wherein said at least one oxidation base is present in an amount ranging from 0.0005 to 12% by weight relative to the total weight of the composition.

34. (Previously presented) The ready-to-use composition according to Claim 31, wherein said at least one coupler is chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, heterocyclic couplers, and acid-addition salts thereof.

35. (Previously presented) The ready-to-use composition according to Claim 31, wherein said at least one coupler is present in an amount ranging from 0.0001 to 10% by weight relative to the total weight of the composition.

36. (Previously presented) The ready-to-use composition according to Claim 32, wherein said acid-addition salts are chosen from hydrochlorides, hydrobromides, sulphates, tartrates, lactates and acetates.

37. (Previously presented) The ready-to-use composition according to Claim 34, wherein said acid-addition salts are chosen from hydrochlorides, hydrobromides, sulphates, tartrates, lactates and acetates.

38. (Previously presented) A ready-to-use composition for oxidation dyeing of keratin fibers comprising:

(a) at least one enzyme chosen from 2-electron oxidoreductases, said at least one enzyme being chosen from pyranose oxidases, glucose oxidases, glycerol oxidases, lactate oxidases, pyruvate oxidases, and uricases;

(b) at least one donor for said enzyme, said at least one donor being chosen from D-glucose, L-sorbose, D-xylose, glycerol, dihydroxyacetone, lactic acid and its salts, pyruvic acid and its salts, and uric acid and its salts;

(c) at least one anionic surfactant chosen from:

(i) acylisethionates having the structure:

$$R\text{-}CH_2\text{-}CH_2\text{-}SO_3^- M^+ \qquad (I)$$

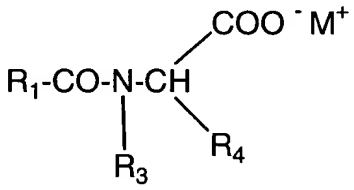
in which R denotes a group R_1COO wherein R_1 is chosen from linear and branched, saturated and unsaturated C_8-C_{30} aliphatic groups, and M^+ is chosen from a proton, an ammonium ion, a Na ion, a K ion, and cationic organic amine residues;

(ii) acyltaurates having the structure:

$$R\text{-}CH_2\text{-}CH_2\text{-}SO_3^- M^+ \qquad (I)$$

in which R denotes a group R_1CONR_2 wherein R_1 is chosen from linear and branched, saturated and unsaturated C_8-C_{30} aliphatic groups, and R_2 is chosen from a hydrogen atom and C_1-C_4 alkyl radicals, and M^+ is chosen from a proton, an ammonium ion, a Na ion, a K ion and cationic organic amine residues;

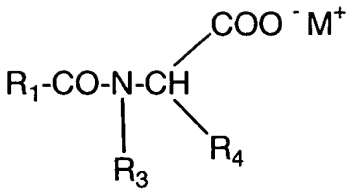
(iii) acylsarcosinates having the structure:



(II)

wherein R_1 is chosen from linear and branched, saturated and unsaturated C_8-C_{30} aliphatic groups, and M^+ is chosen from a proton, an ammonium ion, a Na ion, a K ion, and cationic organic amine residues; R_3 denotes CH_3 and R_4 denotes hydrogen;

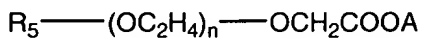
(iv) acylglutamates having the structure:



(II)

wherein R_1 is chosen from linear and branched, saturated and unsaturated C_8-C_{30} aliphatic groups, and M^+ is chosen from a proton, an ammonium ion, a Na ion, a K ion, and cationic organic amine residues; R_3 denotes hydrogen and R_4 denotes $CH_2CH_2COO^-M^+$;

(v) polyoxyalkylenated carboxylic ether acids and salts thereof having the structure:



(III)

in which:

R_5 is chosen from alkyl and alkylaryl groups and n is an integer or decimal number which ranges from 2 to 24; A is chosen from a proton, an ammonium ion, a Na ion, a K ion, a Li ion, a Mg ion, cationic monoethanolamine residues, and cationic triethanolamine residues;

(vi) fatty glucamide sulphates;

(vii) alkylgalactoside uronates; and

(viii) anionic derivatives of alkylpolyglucoside chosen from alkylpolyglucoside sulphates, alkylpolyglucoside sulphonates, alkylpolyglucoside ether carboxylates, alkylpolyglucoside sulphosuccinates, alkylpolyglucoside isethionates, and alkylpolyglucoside phosphates; and

(d) at least one oxidation base chosen from

- para-phenylenediamines chosen from para-phenylenediamine, para-toluylenediamine, 2-chloro-para-phenylenediamine, 2,3-dimethyl-para-phenylene-diamine, 2,6-dimethyl-para-phenylenediamine, 2,6-diethyl-para-phenylenediamine, 2,5-dimethyl-para-phenylenediamine, N,N-dimethyl-para-phenylenediamine, N,N-diethyl-

para-phenylenediamine, N,N-dipropyl-para-phenylenediamine, 4-amino-N,N-diethyl-3-methylaniline, N,N-bis(β-hydroxyethyl)-para-phenylenediamine, 4-amino-N,N-bis(β-hydroxyethyl)-2-methylaniline, 4-amino-2-chloro-N,N-bis(β-hydroxyethyl)aniline, 2-β-hydroxyethyl-para-phenylenediamine, 2-fluoro-para-phenylenediamine, 2-isopropyl-para-phenylenediamine, N-(β-hydroxypropyl)-para-phenylenediamine, 2-hydroxymethyl-para-phenylenediamine, N,N-dimethyl-3-methyl-para-phenylenediamine, N,N-(ethyl-β-hydroxyethyl)-para-phenylenediamine, N-(β,γ-dihydroxypropyl)-para-phenylenediamine, N-(4'-aminophenyl)-para-phenylenediamine, N-phenyl-para-phenylenediamine, 2-β-hydroxyethyloxy-para-phenylenediamine, 2-β-acetylaminoethyloxy-para-phenylenediamine, N-(β-methoxyethyl)-para-phenylenediamine, and acid-addition salts thereof;

- double bases chosen from N,N'-bis(β-hydroxyethyl)-N,N'-bis(4'-amino-phenyl)-1,3-diaminopropanol, N,N'-bis(β-hydroxyethyl)-N,N'-bis(4'-amino-phenyl)ethylenediamine, N,N'-bis(4-aminophenyl)tetramethylenediamine, N,N'-bis(β-hydroxyethyl)-N,N'-bis(4-aminophenyl)tetramethylenediamine, N,N'-bis(4-methylaminophenyl)tetramethylenediamine, N,N'-bis(ethyl)-N,N'-bis(4'-amino-3'-methylphenyl)ethylenediamine, 1,8-bis(2,5-diaminophenoxy)-3,5-dioxaoctane, and acid-addition salts thereof;

- ortho-aminophenols chosen from 2-aminophenol, 2-amino-5-methylphenol, 2-amino-6-methylphenol, 5-acetamido-2-aminophenol, and acid-addition salts thereof;

- para-aminophenols chosen from para-aminophenol, 4-amino-3-methylphenol, 4-amino-3-fluorophenol, 4-amino-3-hydroxymethylphenol, 4-amino-2-methylphenol, 4-amino-2-hydroxymethylphenol, 4-amino-2-methoxymethylphenol, 4-amino-2-aminomethylphenol, 4-amino-2-(β-hydroxyethylaminomethyl)phenol, 4-amino-2-fluorophenol, and acid-addition salts thereof; and

- heterocyclic bases chosen from pyridine compounds, pyrimidine compounds, pyrazole compounds, pyrazolopyrimidine compounds, and acid-addition salts thereof.

39. (Previously presented) A ready-to-use composition for oxidation dyeing keratin fibers, comprising uricase, uric acid, triethanolamine cocylglutamate, para-phenylenediamine, resorcinol and monoethanolamine.

40. (Previously presented) A ready-to-use composition for oxidation dyeing keratin fibers, comprising uricase, uric acid, sodium lauroyl sarcosinate, para-phenylenediamine, resorcinol and monoethanolamine.

41. (Previously presented) A ready-to-use composition for oxidation dyeing keratin fibers, comprising uricase, uric acid, sodium cocoyl isethionate, para-phenylenediamine, resorcinol and monoethanolamine.

42. (Previously presented) A ready-to-use composition for oxidation dyeing keratin fibers, comprising uricase, uric acid, lauryl ether carboxylic acid, para-phenylenediamine, resorcinol and monoethanolamine.

43. (Previously presented) A process for dyeing keratin fibers, comprising:
applying to said keratin fibers a composition, and
developing for a period of time sufficient to achieve a desired coloration;
wherein said composition comprises:
(a) at least one enzyme chosen from 2-electron oxidoreductases,
(b) at least one donor for said at least one enzyme,

(c) at least one anionic surfactant chosen from:

(i) acylisethionates;

(ii) acyltaurates;

(iii) acylsarcosinates;

(iv) acylglutamates;

(v) polyoxyalkylenated carboxylic ether acids and salts thereof;

(vi) fatty glucamide sulphates;

(vii) alkylgalactoside uronates;

(viii) anionic derivatives of alkylpolyglucoside; and

(d) at least one oxidation base.

44. (Previously presented) The process according to Claim 43, wherein said keratin fibers are human hair.

45. (Previously presented) A process for dyeing keratin fibers, comprising:

separately storing a first composition,

separately storing a second composition,

thereafter mixing said first composition with said second composition,

applying said mixture to said fibers and

developing for a period of time sufficient to achieve a desired coloration;

wherein said first composition comprises at least one oxidation base;

wherein said second composition comprises at least one enzyme chosen from 2-electron oxidoreductases and at least one donor for said at least one enzyme;

wherein at least one of said first composition and said second composition contains at least one anionic surfactant chosen from:

(i) acylisethionates;

(ii) acyltaurates;

(iii) acylsarcosinates;

(iv) acylglutamates;

(v) polyoxyalkylenated carboxylic ether acids and salts thereof;

(vi) fatty glucamide sulphates;

(vii) alkylgalactoside uronates; and

(viii) anionic derivatives of alkylpolyglucoside.

46. (Previously presented) A multi-compartment dyeing kit comprising at least two separate compartments, wherein

a first compartment contains a first composition, and

a second compartment contains a second composition;

wherein said first composition comprises at least one oxidation base;

wherein said second composition comprises at least one enzyme chosen from 2-electron oxidoreductases and at least one donor for said at least one enzyme;

wherein at least one of said first composition and said second composition contains at least one anionic surfactant chosen from:

(i) acylisethionates;

(ii) acyltaurates;

(iii) acylsarcosinates;

(iv) acylglutamates;

(v) polyoxyalkylenated carboxylic ether acids and salts thereof;

(vi) fatty glucamide sulphates;

(vii) alkylgalactoside uronates; and

(viii) anionic derivatives of alkylpolyglucoside.

47. (Withdrawn) A process for permanently reshaping keratin fibers, comprising:

applying a reducing composition to keratin fibers to be reshaped, the keratin fibers being placed under mechanical tension before, during or after said applying; and

applying an oxidizing composition to the keratin fibers;

said oxidizing composition comprising:

(a) at least one enzyme chosen from 2-electron oxidoreductases,

(b) at least one donor for said at least one enzyme, and

(c) at least one anionic surfactant chosen from:

(i) acylisethionates;

(ii) acyltaurates;

(iii) acylsarcosinates;

(iv) acylglutamates;

(v) polyoxyalkylenated carboxylic ether acids and salts thereof;

(vi) fatty glucamide sulphates;

(vii) alkylgalactoside uronates; and

(viii) anionic derivatives of alkylpolyglucoside.

48. (Withdrawn) The process according to Claim 47, wherein said keratin fibers to be permanently reshaped are human hair.

49. (Withdrawn) The process according to Claim 47, further comprising the step of rinsing the keratin fibers after said applying of said reducing composition.

50. (Withdrawn) The process according to Claim 47, further comprising the step of rinsing the keratin fibers after said applying of said oxidizing composition.

51. (Withdrawn) A process for bleaching keratin fibers, comprising the steps of:

applying an oxidizing composition to keratin fibers to be bleached, and thereafter rinsing the keratin fibers;

said oxidizing composition comprising:

(a) at least one enzyme chosen from 2-electron oxidoreductases,

(b) at least one donor for said at least one enzyme, and

(c) at least one anionic surfactant chosen from:

(i) acylisethionates;

(ii) acyltaurates;

(iii) acylsarcosinates;

(iv) acylglutamates;

(v) polyoxyalkylenated carboxylic ether acids and salts thereof;

(vi) fatty glucamide sulphates;

(vii) alkylgalactoside uronates; and

(viii) anionic derivatives of alkylpolyglucoside.

52. (Withdrawn) The process according to Claim 51, wherein the oxidizing composition further comprises at least one auxiliary oxidizing agent.

53. (Withdrawn) The process according to Claim 51, wherein said oxidizing composition comprises uricase, uric acid and monosodium lauroyl glutamate.

IX. Evidence Appendix

None

X. Related Proceedings Appendix

None